DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-018253

Address: 333 Burma Road **Date Inspected:** 18-Nov-2010

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: CWI Present: Yes Li Yang No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component: OBG** Segment

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance (QA) Inspector Mr. M. Manikandan was present during the time noted above for observations relative to the work being performed.

OBG # TRIAL ASSEMBLY YARD (11CE)

This QA Inspector witnessed the final bolt tension verification on the lower chevron and upper chevron of segment 11CE. The torque wrench S/N was XO2-414. The QA inspector witnessed 10% of the bolts on a random basis and found the tensioning of the bolts appeared to be in general compliance with the contract specifications. The panel point and bolt size designations were as follows:

PP 101 to PP 103:

M22 X 70 – DHGM 220038 – 480 NM

M22 X 80 - DHGM 220091 - 460 NM

OBG # TRIAL ASSEMBLY YARD (11DE)

This QA Inspector witnessed the final bolt tension verification on the lower chevron and upper chevron of segment 11DE. The torque wrench S/N was XO2-414. The QA inspector witnessed 10% of the bolts on a random basis and found the tensioning of the bolts appeared to be in general compliance with the contract specifications. The panel point and bolt size designations were as follows:

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PP 104 to PP 106:

M22 X 70 - DHGM 220038 - 480 NM

M22 X 80 - DHGM 220091 - 460 NM

OBG # TRIAL ASSEMBLY YARD (11EE)

This QA Inspector witnessed the final bolt tension verification on the lower chevron and upper chevron of segment 11EE. The torque wrench S/N was XO2-414. The QA inspector witnessed 10% of the bolts on a random basis and found the tensioning of the bolts appeared to be in general compliance with the contract specifications. The panel point and bolt size designations were as follows:

PP 107 and PP 108:

M22 X 70 – DHGM 220038 – 480 NM

M22 X 80 - DHGM 220091 - 460 NM

For additional information please reference the pictures below:

OBG # TRIAL ASSEMBLY YARD (11DW)

This QA Inspector along with QA inspector Mr.Manjunath S Math performed dimensional joint survey inspection after heat straightening on the floor beam to verify the flatness using 1500mm straight edge. The measurements were recorded on a separate sheet and forwarded to team leader for review and disposition. The segment and panel point designations were as follows:

Segment 11DW – PP 105

OBG # TRIAL ASSEMBLY YARD (11BW)

This QA Inspector along with QA inspector Mr.Manjunath S Math performed dimensional joint survey inspection after heat straightening on the deck panel to deck panel diaphragm to verify the plumbness and flatness using right angle and 710mm rule. The measurements were recorded on a separate sheet and forwarded to team leader for review and disposition. The segment and panel point designations were as follows:

Segment 11BW - PP 99

OBG # TRIAL ASSEMBLY YARD (11BE)

This QA Inspector along with QA inspector Mr.Manjunath S Math performed dimensional joint survey inspection after heat straightening on the floor beam to verify the flatness using 1500mm straight edge. The measurements were recorded on a separate sheet and forwarded to team leader for review and disposition. The segment and panel point designations were as follows:

Segment 11BE – PP 98 and PP 99

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OBG # TRIAL ASSEMBLY YARD (11CE)

This QA Inspector along with QA inspector Mr. Manjunath S Math performed dimensional joint survey inspection after heat straightening on the floor beam to verify the flatness using 1500mm straight edge. The measurements were recorded on a separate sheet and forwarded to team leader for review and disposition. The segment and panel point designations were as follows:

Segment 11CE - PP 101, PP 102 and PP 103

This QA Inspector randomly observed the following work in progress:

OBG # TRIAL ASSEMBLY YARD (11CE)

The QA Inspector observed the welding operation per the SMAW process on weld joint no. 006 in the (4G) overhead position on corner assembly piece mark no. CA087. The location was the complete joint penetration groove weld joining edge panel and deck panel of segment 11CE at work point E5. The welder ID was 067752. The welding was performed against welding repair report B-WR17233 Rev.0. The welding variables recorded by QC appeared to comply with the WPS-345-SMAW-4G (4F)-FCM-Repair-1.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



Summary of Conversations:

No relevant conversations were reported on this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 15000422372, who represents the Office of Structural Materials for your project.

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Inspected By:	Manikandan, Murugan	Quality Assurance Inspector
Reviewed By:	Peterson,Art	QA Reviewer